



## News Release

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### **Western Equine Encephalitis Virus Found in Washington County**

*Public advised to protect themselves from mosquitoes*

(St. George, UT) -- The virus that causes Western Equine Encephalitis (WEE) has been found in the St. George area of Washington County. The virus that causes WEE is not the same as or even a close relative of the West Nile Virus (WNV). On September 17, 2002, the Centers for Disease Control and Prevention confirmed that the WEE virus had been found in mosquitoes collected near Snow Canyon High School. Human cases have not been identified. Ongoing mosquito control efforts have been enhanced around the area where the infected mosquitoes were trapped.

While West Nile Virus has not been found in Utah yet, the WEE virus is not new to Utah. The WEE virus was first isolated in California in 1930 from a horse with encephalitis, and, since then, has been responsible for cases of encephalitis in horses and humans in the western U.S. and Canada. The first WEE outbreak in Utah occurred along the Wasatch Front in 1933 and affected nearly 4,000 horses. Several smaller outbreaks have occurred since. The most recent outbreak that affected a large number of people was in 1958 when 48 humans and 288 horses were infected. The last time WEE was found in Utah was in 1994 when a sentinel chicken was found to have been infected with the virus.

While the WEE virus is not related to the West Nile Virus, there are some similarities. Both viruses have a life cycle that most commonly includes only birds and mosquitoes. Both can occasionally infect humans and horses, and both cause an inflammation of the brain. But there are important differences. The WEE virus does not kill infected birds while the West Nile Virus

has killed tens of thousands of birds in the U.S. Infections

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with the WEE virus are most commonly reported in infants under one year of age whereas cases of the West Nile Virus have been reported most commonly in persons over 50 years of age.

Most people who become infected with the WEE virus will either have no symptoms at all or a mild illness. The symptoms of WEE infection are similar to other viral illnesses and include headache, high fever, sore throat, dizziness, chills, and an upset stomach. The mild form of the illness will last for several days and go away on its own. Persons who have the rare and more severe form of the illness will become sleepy, confused and may develop seizures, go into a coma, and, on rare occasions, die.

Utah's local mosquito abatement districts, local health departments, the Utah Department of Agriculture and Food, and the Utah Department of Health have been looking for WEE as part of the mosquito-borne virus surveillance program. The goal of this surveillance program is to find mosquito-borne viruses early so steps can be taken to protect humans and horses from infections. Mosquito control efforts can be intensified in the area where virus is found and the public can be notified about the more urgent need to protect themselves and their animals from mosquitoes. This surveillance program, which has existed for decades, has been enhanced recently so that Utah would be better prepared for the arrival of West Nile Virus. One enhancement has been to look for the viruses using very sensitive molecular technology. Because these tests are very sensitive, extremely small amounts of a virus can be detected within the mosquitoes themselves. This is what happened in St. George where a single mosquito pool was found to have the WEE virus.

Since June 2002, 757 pools of mosquitoes have been tested at the Utah Public Health Laboratory; 18 of the pools were from Washington County. The mosquitoes have been tested for West Nile Virus, WEE virus and St. Louis Encephalitis virus. All have been negative except this one pool from the St. George area. The detection of the WEE virus in a single mosquito

pool is a likely indication that this virus is just beginning to circulate

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in birds and mosquitoes in the area. We have every reason to believe that the risk to humans and horses in this area is low and there is no cause to panic. Since WEE can be a serious disease in both humans and horses, however, people are advised to protect themselves and their horses from mosquitoes. Becoming more 'mosquito-aware' is also wise since West Nile Virus will likely reach Utah either this year or next.

Steps people can take to protect themselves from mosquito bites include:

- Reduce time spent outdoors when mosquitoes are most likely to be biting - dusk and dawn.
- Make sure screen doors and window screens are in good condition.

If you must be outside while mosquitoes are active:

- Wear light-colored, long pants and long-sleeved shirts.
- Apply mosquito repellent to exposed areas of skin (repellents that contain DEET are the most effective; read the label before using them and be especially careful when using repellents on children and infants).
- **For parents:** Remember that WEE disease can be very severe in infants under one year of age. Since insect repellents should be used very sparingly in this age group, parents may want to consider either not taking their infants outside at dusk and dawn or protecting them with mosquito netting around the infant's carrier or stroller.

Around your home and property, eliminate places for mosquitoes to reproduce:

- Eliminate standing water sources around housing areas (i.e., water in old tires, cans, poorly kept swimming pools, toys, wheelbarrows, etc.).
- Water that is kept outside for a reason (e.g., pet water dishes, birdbaths, etc.) needs to be changed at least once every 2-3 days.
- Clean rain gutters at least once a year.
- Aerate ornamental ponds and/or stock them with mosquito-eating fish (*Gambusia affinis*). Contact your local mosquito abatement district to ask about these fish.
- Maintain swimming pools or drain them.

Horse owners are advised to make sure their horses are vaccinated against the WEE virus and to protect their animals from mosquitoes. The first step is to check their property and remove all sources of stagnant water in which mosquitoes might breed (see above). Horse owners may

also wish to consider the use of insect repellents on their animals.

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